

From MONSANTO CHEMICAL COMPANY

(J. V. Waggoner
R. T. Clark

At Texas City, Texas

Date September 15, 1958

To Mr. G. T. Ryan

Reference

At Texas City

Subject VCM QUALITY PROBLEMS

In accordance with your request today, this will summarize past VCM quality problems as we know them to date.

PANTASOTE COMPANY

Pantasote received one yellowed car of VCM in December, 1957, and four in May, 1958. We are now out as a supplier at Pantasote because of this problem. Between the bad car in December and the four bad ones in May, we shipped Pantasote seventeen good cars. Cost of returning one entire bad car and part of another to Texas City was about \$3,000. Sale of two cars at a discount price cost us about \$1,000 in lost profit. Pantasote had complained several times of sediment in our VCM.

We reduced PVC price - Pantasote stopped purchases.

FIRESTONE

We shipped Firestone one yellow VCM tank car in December, 1957. We are now out as a supplier at Firestone, but for other reasons. Cost for returning the car to Texas City was about \$2,500.

GREAT AMERICAN PLASTICS COMPANY

In August, 1958, Great American advised of water in a tank car of VCM. We still continue to supply them. Great American has also complained of unexplained trouble in polymerization of VCM, but this problem is not limited only to our VCM.

SOLVAY PROCESS DIVISION OF ALLIED CHEMICAL CORP.

Solvay rejected five tank cars of VCM shipped by us to them on September 2, 1958, because of rust and dirt particles in all cars and flocculated polymer particles in three cars. Extra freight for sending the material to Springfield amounts to almost \$5,000 extra over the cost for sending directly from Texas City to Springfield.

*Case OK
AC
Spfld*

SPRINGFIELD

Springfield has checked color of incoming cars for us from time to time since May, 1958. It appears that the color problem is under control; however, five cars received at Springfield in August were said to contain

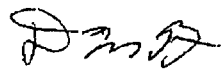
Mr. G. T. Ryan

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considerable sludge, part of which was found to be polymer. They have also found water in some recent cars of VCM. It is unknown how much the use of off-spec material has cost the Springfield PVC Production Department. } *NOTE*

The above cost to Monsanto for extra freight and sale of two off-spec cars at a discount is roughly \$11 - 12 M. These are direct results of quality problems. An additional loss in sales to Solvay and Pantasote to date as a direct result of quality is } *QUESTION* estimated to be about 20 cars of VCM. The loss will continue at a rate of up to 6 cars per month if we cannot regain the confidence of these customers. The immediate danger of losing additional customers must also be recognized. The net profit to Monsanto on sale of each incremental car of VCM will average at least \$2,500/car. The mounting total of lost profits is obvious.


D. M. Brown

DMB:rf

CBY 1111875

RSV0031135

Monsanto Chemical Company

CC: R. T. Clark
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September 15, 1958

TO: Mr. J. V. Waggoner

AT: Texas City

SUBJ: SOLVAY PROCESS DIVISION
ALLIED CHEMICAL CORPORATION
Perkins Plant
Moundsville, West Virginia

This is in regard to the following cars of Vinyl Chloride Monomer which the subject company rejected on their arrival at their Perkins plant due to suspended particles and sediment and high acetylene content:

GATX 37819
37823
37805
76243
SHPX 5121

1) Loaded white spheres being cleaned & inspected
2) Originally sent out for Spfld but diverted to Solvay

Rejection of the above five cars will cost Monsanto almost \$5,000 out-of-pocket for forwarding to our Springfield plant. Our cost for getting the five cars to Solvay's Moundsville plant was exactly the cost for shipping cars directly from Texas City to Springfield.

On September 12, I called Mr. John Budinscak, Chief Chemist at Solvay's Moundsville plant to inquire about the details of the complaint which they had made to us from their New York office. The five cars were claimed to have 3.4 to 4.2 ppm acetylene. Our analysis of the cars before leaving showed them to have from less than 1 to 1 ppm acetylene. Solvay employs a titration type of analytical method, whereas we have a spectrophotometric method. Solvay is sending a copy of their method to my attention.

All of the cars were said to have sediment which was mostly of a reddish color but which included black particles. The following three cars were said to have, in addition to the darker particles, a white flocculated material which was detected even when sampling from the dip tube on the cars at various heights:

GATX 37819
37805
76243

In the opinion of the laboratory people at Solvay's plant, the white material was polymer. They claimed it was definitely not water. The cars all contained about 150 ppm water, according to their analysis.

Production has requested engineering to estimate cost of installing filters.

CBY 1111876

RSV0031136